

TABLE 3.—*Daily totals and departures of solar and sky radiation during April, 1919.*

[Gram—calories per square centimeter of horizontal surface.]

Day of month.	Daily totals.			Departures from normal.			Excess or deficiency since first of month.		
	Wash- ington.	Madison.	Lin- coln.	Wash- ington.	Madison.	Lin- coln.	Wash- ington.	Madison.	Lin- coln.
Apr. 1.....	cal. 340	cal. 554	cal. 319	cal. -35	cal. -83	cal. 5	cal. -35	cal. 173	cal. 106
2.....	380	299	429	3	-83	5	32	91	101
3.....	510	86	176	130	-298	-247	98	207	348
4.....	167	235	586	-215	-151	164	-117	358	184
5.....	289	290	462	-96	-98	41	-213	456	143
6.....	502	401	329	115	11	-91	98	445	234
7.....	356	110	530	-34	-281	111	-132	729	123
8.....	430	501	336	38	198	-62	94	618	185
9.....	518	117	69	121	-277	-348	27	895	533
10.....	368	169	288	-29	-227	-128	-2	-1,122	961
11.....	81	148	524	-319	-249	109	-321	-1,371	552
12.....	414	126	643	12	-273	229	-309	-1,644	823
13.....	472	524	166	67	124	-247	-212	-1,529	570
14.....	273	93	125	-134	-309	-287	-376	-1,829	857
15.....	214	48	128	-196	-356	-283	-572	-2,185	1,140
16.....	102	85	402	-311	-322	79	-883	-2,307	1,061
17.....	156	416	729	-260	0	314	-1,143	-2,501	747
18.....	313	580	619	-106	169	202	-1,249	-2,335	545
19.....	655	402	354	233	-15	-65	-1,016	-2,350	610
20.....	500	616	661	75	196	240	-941	-2,154	370
Decade departure.....							-939	-1,832	291
21.....	623	607	181	194	184	-242	-747	-1,970	612
22.....	592	463	548	100	36	123	-587	-1,931	489
23.....	589	403	109	154	-27	-18	-433	-1,961	507
24.....	480	448	321	42	15	-108	-391	-1,946	615
25.....	565	694	564	124	258	133	-267	-1,658	482
26.....	468	681	143	24	243	-292	-243	-1,445	774
27.....	694	87	138	246	-353	-301	3	-1,798	1,075
28.....	278	384	113	-173	59	-330	-170	-1,557	-1,405
29.....	586	380	64	132	-65	-383	38	-1,922	-1,788
30.....	408	95	213	11	-352	-238	-27	-2,274	-2,026
Decade departure.....							-914	-120	-1,656
Excess or deficiency {gr.-cal since first of year}.....							-539	-4,402	-3,375
Excess or deficiency {per cent.....}							-1.6	-12.9	-8.6

MEASUREMENTS OF THE SOLAR CONSTANT OF RADIATION
AT CALAMA, CHILE.

By Dr. C. G. ABBOT.

Dated: Astrophysical Observatory, Smithsonian Institution, Washington, May 28,
1919.]

In continuation of the publication begun in February, I communicate the following results of the measurements of the solar constant of radiation which were made

by the Smithsonian observers, Messrs. A. F. Moore and L. H. Abbot, at Calama, Chile, in the month of March, 1919.

The arrangement of the observations in the table is the same as that employed in the preceding communications, and is fully explained in the MONTHLY WEATHER REVIEW for February, 1919.

TABLE 1.—*Measurements of the solar constant of radiation at Calama, Chile.*

Date.	Solar Const.	Grade.	Trans- mission coeffi- cient at 0.5 mil- crons.	Humidity air mass 3.			Remarks.
				p/p ₀	V. P.	Rel. Hum.	
A. M. Mar. 1	cal. 1.952	VG—	0.771	0.233	cm. 0.75	% 60	Considerable cirri in north and east.
P. M. Mar. 3	1.949	VG	.848	.367	.58	29	Considerable cirri and cumuli in east, with line of small cirrocumuli low in west.
5	2.015	G—	.810	.400	.48	21	Considerable cirri in east, north, south and low in west.
6	1.931	E—	.856	.473	.36	16	Cumuli low in east and cirri in south and west.
A. M. Mar. 9	1.938	G	.828	.380	.24	22	Cirri spread over most of sky.
10	1.916	VG—	.844	.414	.29	26	Some cirri around horizon in north and east with large patch just below sun.
P. M. Mar. 13	1.981	P+	.845	.397	.44	22	Considerable cirri in east. More coming in northwest.
A. M. Mar. 17	1.905	VG—	.837	.352	.53	49	
18	1.949	VG—	.851	.357	.35	35	
19	1.934	VU+	.855	.406	.37	35	
21	1.891	VG+	.852	.356	.49	56	
25	1.942	VG	.849	.368	.37	31	Cirri scattered over large part of east and west.
26	1.938	E—	.868	.508	.29	23	Cloudless except distant cirri in northeast.
28	1.955	VG+	.861	.500	.31	29	Considerable cirri in west.
30	1.942	VG+	.843	.335	.46	46	Considerable cirrocumuli in west and south. Small patches also in east.
31	1.913	VG+	.844	.325	.52	50	